

**What is claimed is:**

1. A particulate matter vibro-fluidizing apparatus having vibrating means and means for treating the particulate matter, said means for treating the particulate matter comprising a set  
5 of different types of vibrating bodies operating in cooperation with said vibrating means, wherein said particulate matter is fluidization-treated by a cooperative vibrating action occurring between said different types of vibrating bodies.
2. The particulate matter vibro-fluidizing apparatus of claim 1, wherein the vibrating bodies are constituted by a container filled with the particulate matter and a vibrating medium  
10 installed within the container.
3. The particulate matter vibro-fluidizing apparatus of claim 1 or 2, wherein the cooperation of the different vibrating bodies of the vibrating means comprises cooperation where the vibrating means is coupled with one of the vibrating bodies, and cooperation where the other vibrating body receives vibrations from the one vibrating body.
- 15 4. The particulate matter vibro-fluidizing apparatus of claim 1 or 2, wherein the cooperation of the different types of vibrating bodies of the vibrating means is cooperation coupling with the vibrating means in such a manner that each vibrating body is controlled by an individual vibration.
5. The particulate matter vibro-fluidizing apparatus of any one of claims 2 to 4, wherein the  
20 vibrating medium is a porous plate.
6. The particulate matter vibro-fluidizing apparatus of any one of claims 2 to 4, wherein the vibrating medium is an aggregate comprising a plurality of spherical bodies.
7. A particulate matter vibration treatment apparatus having vibrating means and means for treating the particulate matter, said means for treating the particulate matter comprising:  
25 a container operating in cooperation with said vibrating means; and  
amplifying means for amplifying vibrations of the container;

8. The particulate matter vibration treatment apparatus of claim 7, wherein the vibrating means cooperates in such a manner as to apply vertical vibrations to the bottom part of the container.

10. The particulate matter vibration treatment apparatus of any one of claims 7 to 9, said amplifying means comprising:

floating bodies being provided between said plate and the container so as to collide with said plate.

12. The particulate matter vibration treatment apparatus of claim 8 or 9, wherein the floating bodies are constituted by a plurality of spherical bodies made of metal, resin or rubber.

13. The particulate matter vibration treatment apparatus of any one of claims 7 to 12, wherein the particulate matter treatment means is used within a vacuum.